REMARKS

Claims 1-20 are pending in this application. Claims 3, 4 and 17 are amended in several particulars for purposes of clarity in accordance with current Office policy, to assist the examiner and to expedite compact prosecution of this application.

I. Information Disclosure Statement

The Information Disclosure Statement filed on 11 February 2004 has been considered by the Examiner. On a copy of PTO-1449 with the Examiner's signature attached to Paper No. 20051016, it was handwritten that no date listed, for the two (2) U.S. patent applications cited in the IDS. Those two U.S. applications cited in the IDS were filed on 11 February 2004 and serial numbers have been assigned as follows:

- U.S. Patent Application Serial No. 10/775,256 to SOON-PHIL LEE *et al.*, entitled *SYSTEM FOR INTERCONNECTING WIRED AND WIRELESS PHONE SERVICES AND METHOD FOR PROCESSING CALL*, which was filed on 11 February 2004
- U.S. Patent Application Serial No. 10/775,172 to CHAE-HO KO *et al.*, entitled *METHOD FOR INTERCONNECTING OF SYSTEM FOR INTERCONNECTING WIRED AND WIRELESS PHONE SERVICES*, which was filed on 11 February 2004

The Applicant appreciates the Examiner's consideration of references cited in the IDS filed on 11 February 2004.

II. Specification

The disclosure is objected to because the Applicant uses "wireless terminal 230, 250 and 270" on pg. 16, lines 1 and 4. Examiner suggests using "wireless terminal 220, 240 and 260". Paragraphs 78 and 79 of page 16 were amended accordingly.

III. Claim Rejections - 35 USC § 102

No claim is anticipated under 35 U.S.C. §102 (b) unless all of the elements are found in exactly the same situation and united in the same way in a single prior art reference. As mentioned in the **MPEP §2131**, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson,* 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03.

A. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being unpatentable over Booton (U.S. 6,337,857), (hereinafter Booton). The Applicant respectfully traverses.

1. Regarding claim 1, the Examiner states that Booton discloses a method for operating a service of an exchange apparatus for performing a wired phone terminal subscriber service, the method comprising the steps of performing wired and wireless service registrations (configuration

of telephone and their computers are set by users, in each of the extension subscribers by endowing at least one of a plurality of wired terminals and public and private mobile communication terminals with a wired phone number in accordance with a subscriber registration application (incoming calls from PSTN cause simultaneous ringing on plurality of phones).

However, col. 11, lines 7-16 is only discussing configuring telephones like the ring count rather than registration of the service. Moreover, col. 7, lines 1-9 and lines 27-41, shows that the CTI computer system allows for incoming call from the PSTN to ring multiple phones including a mobile phone and the CTI computer refers to its database and obtains a list of numbers corresponding to potential recipients of the call and sends a signal to those numbers.

On the other hand, in the present invention, states that one of the wired and wireless terminals is endowed with a wired phone number according to a subscriber registration process. A separate number is not given to the telephone, rather from the database, the CTI switch rings multiple phones. There is no actual assigning of a telephone number.

Not discussed by the Examiner, Booton mentions virtual telephones in the CTI system and their corresponding telephone numbers, but this is not referring to a virtual telephone number assigned to an actual phone. In col. 6, lines 65-66, Booton states, "The CTI-enabled PBX 4 also includes a set of "virtual" or "dummy" telephones 24 (shown in FIG. 6)." Therefore, a new wired number is not actually assigned to the telephone according to the subscriber registration process.

2. The Examiner further states that Booton discloses making a call to a wired terminal corresponding to the corresponding wired phone number when an arbitrary wired phone number is called, and making a call to the corresponding public and private mobile communication terminal through a mobile communication network when there is public and private mobile communication terminal to be called simultaneously interconnectively to the wired phone number (incoming calls from PSTN cause simultaneous ringing on plurality of phones and answering the call at different location including a mobile location, see col. 7, lines 1-9 and lines 27-41).

However, in Booton, the new wired phone number is not called for actual wired and wireless terminals. Rather, phone numbers for virtual telephones are called. Col. 7, lines 1-9 and lines 27-41 of Booton only mentions calling multiple phones, but no disclosure as to calling a newly registered wired number that will simultaneously ring the multiple phones. The actual newly assigned number is never actually disclosed. Rather, the CTI enabled computer looks for the list of numbers (#1, #2, #3...#N) from the database and calls such numbers. However, specifically, those phone are never assigned a single wired number.

3. Regarding claim 2, the Examiner states that Booton discloses the method according to claim 1, wherein the extension subscriber comprises a first extension subscriber using only the wired terminal service (see phones 7 and 8 in Fig. 2 and col. 6, lines 61-65).

However, Booton states, "telephones 7 and 8 which are connected to the PBX's 4 and which are associated with computer terminals", which does not necessarily mean that the telephones are using *only* the wired service as the PBX is not necessarily wired only.

One cannot argue that such a description is inherent either since as mentioned above by the MPEP §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Each of the elements are not expressly described. Inherent description is also not pertinent in this discussion, because inherency is involved only where a minor, well-known feature is lacking. Further the CCPA has added that "inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient." *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). Therefore, one cannot assume that the telephones 7 and 8 are connected to only the wired service. In addition, the connection between the telephone and the computer is entirely unclear.

4. Regarding claim 3, the Examiner states that Booton discloses the method according to claim 1, wherein the extension subscriber comprises a second extension subscriber (mobile station 21 in Fig. 2) using only said mobile communication terminal service which is provided using a virtual wired phone number (each phone number corresponds to a dummy or virtual telephones in the CTI, see col. 7, lines 35-50).

However, the present invention concerns actual phones with virtual numbers rather than virtual telephones with numbers.

5. Regarding claim 4, the Examiner states that Booton discloses the method according to claim 1, wherein the extension subscriber comprises a third subscriber using both the wired terminal

service and the mobile communication terminal service provided using the virtual wired phone number (the system shown in Fig. 2 enables incoming call from PSTN to cause simultaneous ringing at plurality phones, see col. 7, lines 1-9 and each phone number corresponds to a dummy or virtual telephones in the CTI, see col. 7, lines 35-50).

However, as the Examiner states, *each* phone number corresponds to a virtual telephone and the claim of Booton states the same. Here, in the present invention, however, the virtual phone number relates to a subscriber using both wired and wireless service. Therefore, Booton is dealing with virtual phones rather than actual phones and a virtual phone *number* is not dealing with both wired and wireless service as each phone number corresponds to a different virtual telephone.

6. Regarding claim 8, the Examiner states that Booton discloses registering the wired phone number with which the wired terminal constructing an extension network is endowed, the wired phone number with which the public and private mobile communication terminal is endowed, and a mobile identifier number with which the public and private mobile communication terminal is endowed from the public mobile communication network (GSM 20, Fig. 2) in a database as extension subscriber information (plurality of phones including mobile station 21, and the list of numbers are stored in the data base of the CTI, see col. 7. lines 27-45 and Figs. 2 and 3).

However, as mentioned in col. 7, lines 31-35, the database stores a list of numbers corresponding to potential location for the intended recipient of the call. There is no indication that a single wired number is registered with the wired terminal and the same wired phone number is registered with which the mobile terminal and along with specifically, the mobile identifier of the

wireless terminal.

7. Regarding claim 9, the Examiner states that Booton discloses registering first identification information indicating whether an arbitrary wired phone number is a number which is connected to a terminal or a number which is not connected to a terminal (when a call is received, the CTI is asked to give the list of numbers corresponding to a potential recipient of the call, see col. 7, lines 27-45).

However, reading a group of telephone numbers corresponding to potential recipients of the call from a database is not the same as registering an identification information that indicates whether a number is connected or not connected to the terminal. There is no specific disclosure as arranged in the claim. As mentioned in MPEP §2131, every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson,* 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03. Here, it is clear that recalling a list of called numbers does not disclose the entire limitation as exactly arranged in the claim.

8. Regarding claim 9, the Examiner states that Booton discloses a second identification

indicating whether the wired phone number uses a multiple terminating service or not, and a wired phone number of the public and private mobile communication terminal which is called by the multiple forwarding function in said database (connecting the incoming call to the answering calls or initiating a conference and the list of numbers are in the database 40, see col. 7, lines 53-64 and Fig. 3).

However, merely connecting or initiating a conference call even from the list of numbers does not disclose an actual identification indicating that the assigned wired phone number uses multiple terminating services and the wired phone number of the mobile phone that is called. The actual identifier is not given for both.

9. Regarding claim 10, the Examiner indicates that Booton discloses transmitting the wired phone number with which the corresponding public and private mobile communication terminal is endowed using a caller identification, when the private mobile communication service is used as a result of the determination (sending the CTI route request signal including dialed directory number of terminating call, see col. 4, lines 28-32).

However, the simple dialed number is not what the claim states. Moreover, col. 4, lines 28-32 only state to respond to receipt of a call answered signal from the switch in respect to the originating call, by sending to the switch a signal for causing the connection of that terminating call to that answered originating call. The present claim indicates transmitting the wired phone number that was assigned and registered to the terminal. Further, such a number of Booton is not endowed with caller identification in Booton.

10. Regarding claim 11, the Examiner states Booton discloses transmitting the mobile identifier number of the public and private mobile communication terminal which is received from the public and private mobile communication terminal using a caller identification, when the public mobile communication service is used as a result of the determination (the identities of a plurality of computer terminals linked in a network are stored in association with respective directory numbers of telephone terminal, see col. 5, lines 42-61).

In addition to remarks concerning claim 10, Booton is discussing the computer terminals rather than the MIN of the mobile terminal and there is also no indication of caller identification. The determination of Booton is concerning the computer terminals rather than determining whether the private mobile communication services is used or not using the outgoing number. The association is related to the computer terminal in Booton and therefore lacks the exact disclosure as arranged in the claim.

III. Claim Rejections - 35 USC § 103

According to MPEP 706.02(j), the following establishes a *prima facie* case of obviousness under 35 U.S.C. §103:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or

to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

A. Claims 12-20 are rejected under U.S.C. 103(a) as being unpatentable over Booton in view of Cyr (U.S. 6,223,055), (hereinafter Cyr). The Applicant respectfully traverses.

1. Regarding claim 14, the Examiner states that Cyr further discloses the step of performing the billing applies an extension billing rate used when a speech is made between extension subscribers using the private mobile communication network (the subscriber and the employer are billed according to personal and business services respectively, see col. 5, lines 46-64).

However, as seen in col. 5, lines 46-64, the subscriber is billed according to personal and business use and the subscriber must indicate each time what kind of use is made. This, however, is not teaching or suggesting applying the extension billing rate to a communication.

2. Regarding claim 15, the Examiner states that Cyr further discloses the step of performing the accounting applies an external line billing rate used when a speech is made between

extension subscribers using the public mobile communication network (airtime and other feature charges are applied when employees uses the system while they are offsite, see col. 5, lines 16-33).

However, Cyr is not teaching an external line billing rate as col. 5 of Cyr states that the same services used on-site by public wireless markets are expected to be used once the user has become accustomed to using the business services on-site even while being off-site. Therefore, external line billing rate is not taught or suggested to be applied, rather the opposite is true in Cyr.

3. Regarding claim 17 as recited in claim 13, Cyr further discloses the private mobile communication network is used when the charge is performed, an extension billing rate may be applied, and when the public mobile communication network is used, external line billing rate may be applied (airtime and other feature charges are applied when employees uses the system while they are offsite, see col. 5, lines 16-33 and Fig. 1).

However, Cyr is not distinguishing between the private mobile communication network and the public, but rather is discussing only the "public wireless markets" as mentioned in lines 23 and 32 of col. 5. Further, Cyr teaches that on-site air time charges are promoted after becoming accustomed to the services. Therefore, Cyr actually teaches away from the presently claimed invention.

4. Regarding claim 18, the remarks concerning claim 1 apply for Booton regarding the wired number. Further, Cyr fails to teach the assignment of the wired number. Further, there is no teaching in Cyr and Booton that a computer readable medium includes such computer executable

instructions.

5. Regarding claim 19, the Examiner states that Booton further discloses receiving the subscriber registration application for wired and wireless services from the arbitrary extension subscriber before performing wired and wireless service registrations (configuration of telephones and their associated computers could be set by the user to enable system's procedure to be carried out, see col. 11, lines 4-17).

However, col. 11 only indicates configuration in general with the only specifics as multiple ringing which is clearly not related to subscriber registration.

6. Regarding claim 20, in addition to remarks concerning claims 1-19, both Booton and Cyr fail to teach or suggest a computer readable medium having stored such a data structure. Booton only mentions a computer, but not that the computer executable instruction are stored in a data structure as specifically claimed.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment. Should there be a deficiency in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of

Applicant's undersigned attorney in the amount of such fees.

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